

533,613

11/353613

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
21 May 2004 (21.05.2004)

PCT

(10) International Publication Number
WO 2004/042015 A2

- (51) International Patent Classification⁷: **C12N**
- (21) International Application Number:
PCT/US2003/034599
- (22) International Filing Date: 31 October 2003 (31.10.2003)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:
60/423,244 1 November 2002 (01.11.2002) US
- (63) Related by continuation (CON) or continuation-in-part (CIP) to earlier application:
US 60/423,244 (CON)
Filed on 1 November 2002 (01.11.2002)
- (71) Applicant (*for all designated States except US*): **MAYO FOUNDATION FOR MEDICAL EDUCATION AND RESEARCH** [US/US]; 200 First Street S.W., Rochester, MN 55905 (US).
- (72) Inventors; and
- (75) Inventors/Applicants (*for US only*): **VILE, Richard, G.** [GB/US]; 2107 Washington Lane S.W., Rochester, MN 55902 (US). **AHMED, Atique** [BD/US]; 620 2nd Avenue N.W., Rochester, MN 55901 (US).
- (74) Agent: **ELLINGER, Mark, S.**; Fish & Richardson P.C., P.A., 60 South Sixth Street, Suite 3300, Minneapolis, MN 55402 (US).
- (81) Designated States (*national*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (*regional*): ARIPO patent (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).
- Published:**
— *without international search report and to be republished upon receipt of that report*
- For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.*

(54) Title: **METHODS AND VECTORS FOR CONTROLLING GENE EXPRESSION**

(57) Abstract: Viral vectors that include a nucleic acid encoding a therapeutic polypeptide operably linked to a heterologous destabilizing element are described.

WO 2004/042015 A2